



APPENDIX B: CAPABILITIES ASSESSMENT

ADOPTED DECEMBER 2012



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Introduction

The purpose of the Capabilities Assessment is to evaluate Adams County's capabilities in mitigating the effects of the hazards identified in the Hazard Identification and Risk Assessment. It highlights ongoing activities that began before this planning process that should be incorporated into the County's overall mitigation strategy, and also highlights gaps and shortfalls within the existing governmental capabilities.

The assessment includes an examination of the following local capabilities:

1. Organizational Roles and Capabilities
2. Operational and Training Capabilities
3. Administrative and Technical Capability
4. Fiscal Capability
5. Legal and Regulatory Capability
6. Overall Policy and Program Capabilities

The information was compiled from existing plan information, policies and staff interviews. The assessment utilized the most current information available at the time of the plan development, but recognizes that the implementation of emergency management activities is a dynamic and evolving process. For the most current information on roles and responsibilities we recommend the reader refer to the County's Emergency Operations Plan and other relevant planning documents.

An Integrated Approach

The Adams County Comprehensive Plan provides a concise statement of the County's objectives for future development within unincorporated areas of the County and in municipal growth areas. As part of this effort, other County plans including the Transportation Plan, Open Space, Parks and Trails Master Plan, and the Hazard Identification and Risk Assessment (HIRA) (Appendix C) have been incorporated. This level of integration reflects Adams County's commitment to a more resilient and sustainable future.

The information compiled for this assessment serves as the foundation for designing an effective hazard mitigation strategy that is incorporated into the County Comprehensive Plan and prioritized mitigation goals, policies, and strategies.

Organizational Roles and Capabilities

Pursuant to Section 24-33.5-707, C.R.S., “each County shall maintain a disaster agency”. The disaster agency shall cooperate with the disaster agencies of municipalities situated within its borders. Additionally, the director of the disaster agency is to be “appointed and governed by the governing body of the jurisdiction” and is responsible for the planning and coordination of the local disaster services (C.R.S. 24-33.5-707(4)). The disaster services necessary are generally considered in terms of disaster prevention, preparedness, response, and recovery.

In Adams County, the Office of Emergency Management is designated as the County disaster agency. The Director of Emergency Management, pursuant to statute, is appointed by the County Commissioners and coordinates disaster services for the County. Departments, elected officials, special districts and non-governmental organizations are responsible, within their statutory and local authorities, to provide assistance and support in a disaster situation. The roles of each of these agencies, as they relate to disaster services, are further defined in the County’s Emergency Operations Plan (EOP). The EOP addresses the roles of the following agencies:

County:

- Adams County – Administration
- Adams County - Administration - Communications Group
- Adams County - Assessor’s Office
- Adams County - Board of County Commissioners
- Adams County - Coroner’s Office
- Adams County - County Attorney’s Office
- Adams County - District Attorney’s Office
- Adams County - Elected Officials & Directors
- Adams County - Facilities Planning & Operations
- Adams County - Facilities Planning & Operations - Animal Shelter
- Adams County - Finance Department
- Adams County - Finance Department – IT
- Adams County - Finance Department – IT – GIS
- Adams County – Finance Department – IT – Telecommunications
- Adams County - Human Resources Department
- Adams County - Human Resources Department - Risk Management
- Adams County - Human Services Department
- Adams County - Office of Emergency Management
- Adams County - Parks & Community Resources Department
- Adams County - Planning & Development Department
- Adams County - Public Works Department
- Adams County - Public Works Department - Fleet
- Adams County - Sheriff’s Office

Incorporated Municipalities:

Municipal Emergency Management Offices
Fire Departments
Law Enforcement Agencies
Municipal Park & Recreation Departments

State:

Colorado Division of Homeland Security and Emergency Management
Division of Fire Prevention and Control

Federal Government

Special Services, Authorities, and Districts:

Adams County Housing Authority
Adams County Economic Development
Adams/JeffCo Hazardous Response Authority
Adcom911
Aurora Mental Health Network
Colorado State University (CSU) Extension
Community Reach Center
CSU - Cooperative Extension Service
Denver International Airport
Denver Regional Council of Governments (DRCOG)
Emergency Medical Service Organizations
Fire Protection Districts
Front Range Airport
Hospitals/Nursing Facilities
Park & Recreation Districts
School Districts
Tri-County Health Department
Water & Sanitation Districts

Non-Governmental and Volunteer Organizations:

Amateur Radio Emergency Service (ARES), Dist 27
Colorado Veterinary Medical Reserve Corps
Mile High Chapter, American Red Cross (Red Cross)
Colorado Voluntary Organizations Active in Disaster (COVOAD)
Rampart Search & Rescue
The Salvation Army
United Way 211

In accordance with the National Incident Management System (NIMS), the Adams County Emergency Operations Center (EOC) operates under the Emergency Support Function (ESF) concept. The lead for each support function is identified in Table 1 below. Additionally, Emergency Operations Plan (EOP) identifies the lead and support agencies required to carry out the responsibilities of each Emergency Support Function. The Emergency Support Function Annexes are considered appendixes to the EOP and describe responsibilities in more detail. Lead and support agencies are responsible for preparing additional standard operating procedures, guidelines, checklist, staffing patterns or resource

requirements needed to complete their assignments both in this Plan and in the Annexes. Each agency is responsible for carrying out the tasks assigned to their agency.

Table 1. Coordinating Agencies for Emergency Support Functions.

Lead Agency Listing	
ESF # FUNCTION NAME	LEAD AGENCY(IES)
ESF 1 - Transportation	Adams County Planning Department - Transportation
ESF 2 - Emergency Communications	Adcom911
ESF 3 - Public Works and Engineering	Adams County - Public Works Department
ESF 4a - Firefighting	Adams County - Sheriff's Office /Fire Districts & Departments
ESF 4b - Emergency Medical Service	Emergency Medical Service Organizations
ESF 5 - Emergency Management	Adams County - Office of Emergency Management
ESF 6 - Mass Care and Human Services	Adams County - Human Services Department
ESF 7a - Resource Support	Adams County - Office of Emergency Management
ESF 7b - Volunteers & Donations	Adams County - Office of Emergency Management
ESF#8 – Health and Medical ESF#8a – Public Health/ Hospitals ESF#8b – Fatalities Management ESF#8c – Mental Health	Overall Lead – Tri-County Health Department Tri-County Health Department Adams County – Coroner's Office Community Reach Center
ESF 9 - Search & Rescue	Adams County - Sheriff's Office
ESF 10 - Hazardous Materials	Adams County - Sheriff's Office /Fire Districts & Departments
ESF 11 - Animal and Agricultural	Adams County – Parks & Community Resources; Facilities Planning & Operations - Animal Shelter
ESF 12 - Utilities	Public Works – Right of Way Section
ESF 13 - Law Enforcement	Adams County - Sheriff's Office
ESF 14 – Damage Assessment	Adams County – Assessor's Office; Public Works
ESF 15 - Emergency Public Information	Adams County – Administrator – Communications Group First Response Agency in Command
Winter Storm Annex	Adams County - Public Works Department
Long Term Recovery	Adams County - Office of Emergency Management

General Emergency Management Services and Programs

As the disaster agency for the County, Emergency Management also provides other services and programs that are vital to all forms of hazard mitigation and preparedness. The top priorities and services are as follows:

- Public Education and Outreach
- Emergency Operations Center
- Training and Exercise
- Plan Development
- Local Emergency Planning Commission

PUBLIC EDUCATION AND OUTREACH

The Comprehensive Preparedness Guide 101 (CPG 101), November 2010, represents a significant evolution in preparedness and emergency management as it sets the standard for a 'whole community' approach. The purpose of whole community planning is to build resilient communities. Additionally, in the aftermath of Katrina legislation was adopted requiring jurisdictions to provide better messaging to their populations with access and functional needs.

Success in meeting these standards depends upon robust collaboration between the public and private sector, different levels of government, municipal jurisdictions, departments, agencies and community groups within Adams County. In 2012, the Office of Emergency Management created a Public Education and Outreach position to address this issue. At the time of developing this Mitigation Plan, Emergency Management was redesigning its web-page and outreach priorities to address these issues.

Additional projects that address needed improvements for Public Education and Outreach are identified in Table 6.1: Non-Ranked Mitigation Action Strategies.

EMERGENCY OPERATIONS CENTER

The Office of Emergency Management has primary responsibility for ensuring that the County has an Emergency Operations Center (EOC) capable of performing those functions as outlined by the National Incident Management System. Emergency Operations Center capabilities are discussed below in Section 3, Training and Operational Capabilities.

TRAINING AND EXERCISE

By resolution, Director of the Office of Emergency Management serves as the principle coordinator for overall County-wide NIMS implementation and compliance. It is the responsibility for each director/elected official to ensure and verify the compliance level of their department or office. NIMS compliance, however, is a baseline and is not considered an accurate measure of capabilities needed to mitigate, prepare, respond and recover to disasters. Additional information on the training and exercise program capabilities are discussed below in Section 3, Training and Operational Capabilities.

PLAN DEVELOPMENT

As mentioned above, Emergency Management is the County agency responsible for the planning and coordination of the local disaster services (C.R.S. 24-33.5-707(4)). The disaster services requiring planning are generally considered in terms of disaster prevention, preparedness, response, and recovery. From this categorization, Emergency Management is lead agency for ensuring the County has a Mitigation Plan, Emergency Response Plan along with supporting functional annexes, Continuity of Operations Plans, and a Recovery Plan. Plan Development is discussed further in Section 6, Legal and Regulatory Capabilities, below.

LOCAL EMERGENCY PLANNING COMMISSION

Historically Emergency Management has informally served as the agency responsible for coordinating the Local Emergency Planning Commission (LEPC). As the coordinating entity, Emergency Management must satisfy all requirements mandated by the County, state, and federal governments including regulations pertaining to hazardous materials facilities (Tier II facilities). The LEPC shall carry out compliance with SARA Title III and other federal, state and local requirements that meet both the letter and spirit of those requirements and that enhance and encourage a partnership between County residents, businesses and industry through an exchange of information and mutual planning.

The mission of the LEPC is to enhance and create plans directing the response to hazardous materials incidents, increase compliance with hazardous materials reporting requirements, and continue to offer access to information on the storage of such materials for the benefit of the County's residents, businesses, and industries. The Adams County OEM website (<http://www.co.adams.co.us/index.aspx?NID=293>) contains information regarding hazardous materials facilities (Tier II facilities) submission requirements and the Local Emergency Planning Commission. The LEPC website includes general information, useful links, and contacts for the following:

- Links and contacts for agencies such as the Chemical Safety Board, Colorado Department of Transportation, Department of Homeland Security, Emergency Management Institute, Federal Emergency Management Agency, and many others.
- Hazardous Materials Facilities (Tier II facilities) requirements and submission forms are included on this website.
- Reference materials and information on training and safety
- The OEM has developed partnerships with numerous industries in the area to serve as members on the LEPC including Conoco Phillips, Suncor, Sinclair Oil, BASF, Atlas Roofing, Denver Water, Xcel Energy, and many of the local fire districts serving the area.

Emergency Management is currently identifying appropriate planning efforts for an incident that involves or affects a hazardous materials facility. These planning efforts include integration of the LEPC into the Training and Exercise Program referenced above, and working closely with appropriate state and federal agencies. In addition, Adams County pursues partnerships with local agencies outside the jurisdiction of Adams County that provide special expertise and would be available to respond. Some of these organizations and their roles are described below:

Organizational Roles and Capabilities | General Emergency Management Services and Programs

- Adams/JeffCo Hazardous Response Authority is responsible for responding to hazardous materials incidents, establishing field operations in conjunction with the incident commanders and the EOC, and containing, removing, or otherwise mitigating the effects of the hazardous substances.
- Fire Departments and Districts will direct hazardous chemical containment and decontamination efforts.

Operational and Training Capabilities

A key component in defining organizational capabilities is the degree to which the organization has the appropriate operational capabilities and regularly trains to implement such capabilities. These capabilities are probably best categorized under the components needed to form a multi-agency coordination (MAC) system (NIMS, 2008). Development of a MAC system allows for integration of operations of field responders (ICS), dispatch agencies, Joint Information Centers (JIC), Emergency Operations Centers (EOC) and policy groups. During times of disaster, the Adams County Office of Emergency Management has responsibility for coordinating a MAC system in Adams County. Based on this responsibility, the County’s operational and training capabilities for each element is discussed below.

Operational Capabilities

FIRST RESPONDERS

There are sixteen fire districts as listed below that serve unincorporated Adams County. Each fire district may serve as the lead agency for their district for ESF 4a – Fire and may serve as the lead for ESF 4b – EMS if such capabilities exist within the district boundaries. Adams County is also served by the Adams County Sheriff’s Office and the police agencies for the seven municipalities within the County. Special fire districts and municipalities within Adams County are shown on Figure 1. The Adams/JeffCo Hazmat Team is responsible for responding to hazardous materials incidents in Adams County and is comprised of many of the fire districts mentioned above.

During an emergency, each jurisdiction is generally responsible for maintaining law and order and implementing an appropriate Incident Command System (ICS) structure. It is the responsibility of the lead agency in command to determine specific actions needed to protect people and property, resources needed, and issue appropriate public warning.

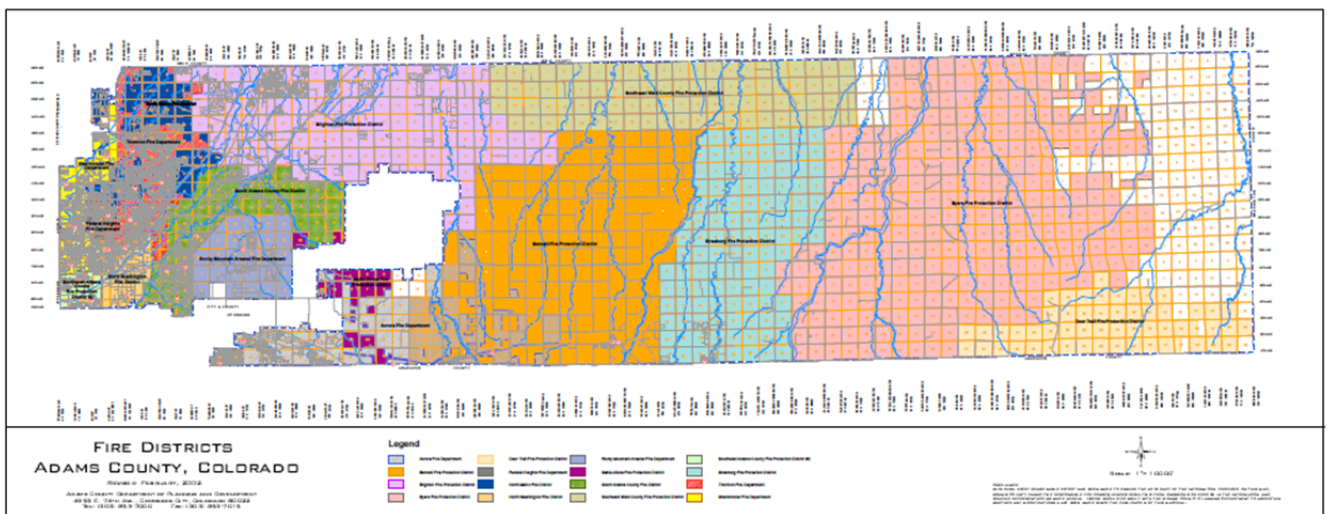


Figure 1. Fire Districts in Adams County (Source: Adams County website)

DISPATCH AGENCIES

Adcom 911 is the lead agency for the development and implementation of ESF 2 - Emergency Communications, and is tasked with allocating and coordinating resources to be used for communications, and working closely with communications and dispatch centers. In addition to Adcom911, Adams County is served by five (5) other dispatch agencies for Arvada, Aurora, City of Federal Heights, Thornton and Westminster respectively. Dispatch agencies are primarily responsible for communications and immediate resource needs for first responders. While these agencies all operate utilizing the Computer Aided Dispatch (CAD) system they have limited ability to see and track information on a regional scale.

JOINT INFORMATION CENTERS

Adams County has a Communication Group operating under the authority of the County Administration. This group informally serves the Public Information Officer (PIO) function during day-to-day events that relate to the administration of the County. Additionally, the Adams County Sheriff's Office has several trained PIO staff that meet the law enforcement needs of the Sheriff. Additionally, most municipalities, fire districts, Tri-County Health Department, large business and non-governmental organizations have trained PIO's. As of the date of this Plan, there are no formal processes and procedures to coordinate a County Joint Information Center.

EMERGENCY OPERATIONS CENTERS

As stated above, the Office of Emergency Management has primary responsibility for ensuring that the County has Emergency Operations Center (EOC) capabilities. Prior to June of 2012, the County EOC was located in the Sheriff's Substation. Emergency Management was effectively rewarded a grant which enabled the EOC to be relocated to the Government Center. This move has enabled each support function to operate with their own computer or phone and to share information within one network system. Additionally, the move enabled EOC to be located within immediate proximity to the Board of County Commissioners and the Policy Group.

POLICY GROUP

The Policy Group for Adams County consists of the directors and elected officials of the County, including the Board of County Commissioners (Board). The responsibilities of the Policy Group include the following:

- Coordination of information released to the public through mass media
- In conjunction with elected officials, provide policy level guidance and decisions to the EOC and departments engaged in disaster response and recovery efforts

The Board has the authority to issue a disaster declaration and to suspend or change the fiscal policies of the County during a disaster. The Board consists of three elected officials with the role of managing the affairs of the County as authorized by state statute. In the event that none of the Board members are available, the County has a Disaster Policy that clarifies the line of succession. The Board is the governing body that sets policies and budgets that are instrumental in the implementation of hazard mitigation actions.

Training Capabilities

Operational capabilities of each component of the MAC system are under the authority and discretion of the responsible agency. While Emergency Management has direct control over the Emergency Operations Center, it is informally considered the primary party for influencing the training of a County-wide multi-agency coordination system.

Since March of 2010, Emergency Management has conducted quarterly exercises for the County EOC and Emergency Support Function Staff. In June 2012, Emergency Management created and hired a Training and Exercise Coordinator. While the exercise program was still under development at the time of drafting this document, the purpose of the program is to evolve the current exercise program into one that creates opportunity for training of the entire MAC system.

Administrative and Technical Capabilities

The administrative and technical capabilities of Adams County are shown in Table 2. The table also identifies the staff, personnel, and department resources available to implement mitigation actions. Specific resources reviewed include reviewing the County’s website, reviewing documents such as Land Development Codes, and interviewing technical personnel such as those with knowledge of emergency management practices.

Table 2. Administrative and Technical Personnel.

Staff/Personnel Resources	Yes/No	Department
Land management practices	Yes	Planning and Development, Public Works
Construction practices related to building and/or infrastructure	Yes	Planning and Development, Public Works
Understanding of natural and/or man-made hazards	Yes	Emergency Management, Sheriff, Public Works, Special Fire Districts
Floodplain managers		Public Works
Surveyors	Yes	Surveyor
Ability to assess the community's vulnerability to hazards	Yes	Emergency Management, Sheriff, Public Works, Special Fire Districts
Personnel skilled in GIS	Yes	Planning and Development
Ability to implement Mitigation Priorities and integrated County Comprehensive Plan	Yes	Planning and Development, Emergency Management, Public Works

Fiscal Capabilities

Finance and Information Technology

The Finance and IT Department is comprised of accounting, budget, information technology, purchasing, and telecommunications functions. The Finance Department provides all necessary accounting, budget, payroll, and purchasing and sales tax support and information to all County departments and the citizens of Adams County. With regard to mitigation, preparedness and response, the Finance Department is responsible for the following:

1. Providing emergency procedures for purchasing supplies and/or equipment necessary for response and recovery operations in the disaster or emergency situation.
2. Maintaining detailed financial records of all Adams County incident costs including payroll accrued during an emergency or disaster and preparing reports for reimbursement accounting purposes.
3. Providing County financial information to state and federal governments for emergency and recovery disaster relief.
4. Coordinating with the elected officials, appointed officials, and department heads on fiscal policy, records, and expenditures.
5. Providing necessary financial documentation for local, state, and federal damage assessment activities.
6. Supply all appropriate forms and organizational items necessary for tracking costs per FEMA requirements.
7. Coordinating disaster reimbursement where such state or federal disaster reimbursement policy requires such coordination.

Adams County adopted the 2012 Consolidated Budget with a total allotment of \$445,589,726. Within this budget, some funds are relevant to hazard mitigation and are itemized in Table 3 below.

Table 3. Fiscal Resources and Capital Projects for 2012

Fund	Appropriation Amount	Hazard Mitigation Expenditures
General	\$162,036,040	Within this fund is money allocated for nearly all services relevant to hazard mitigation including General Government, Health and Welfare, Public Safety, and Public Works.
Taxpayers Bill of Rights (TABOR)	3% Emergency Reserve of non-Federal expenditures	Funds from this appropriation maybe utilized for disaster response but must be paid back within one year pursuant to Tabor Regulations.
Road and Bridge	\$30,053,101	Funds allocated to hazard mitigation include Public Works Code Enforcement, Highway Section and Engineering Section.

Fund	Appropriation Amount	Hazard Mitigation Expenditures
Waste Management Solid Waste Fund	\$490,168	Operating Expenditures includes fees for operators of waste disposal sites within the County designated specifically for the purpose of mitigating possible future environmental problems associated with waste disposal sites.
	\$3,763,593	The fund balance is used to monitor various waste sites. The budgeted spend down is primarily for Contingency payments should they be needed to mitigate impacts of solid waste and hazardous waste programs in the County.

In addition to the funds above, the County is in the process of implementing a stormwater fee. This fee will specifically be utilized to make necessary improvements upon the stormwater system within Adams County. Some of these improvements are identified and prioritized in Table 6.1: Non-Ranked Mitigation Action Strategies.

Legal and Regulatory Capabilities

The legal and regulatory capabilities of Adams County as well as the existing ordinances, codes, and plans that affect the physical or built environment of the County are shown in Table 4.

Table 4. Coordinating Legal and Regulatory Capabilities

Existing Ordinances, Plans, Codes	Local Plan Available
Emergency Operations Plan	Yes. Existing Plan dated 2006, revision expected to be adopted in 2012
Hazard Mitigation Plan	Yes. Regional DRCOG Hazard Mitigation Plan adopted in 2010
Comprehensive Plan	Existing plan adopted in 2004
Capital Expenditures Plan	2012
Land Development Codes	Yes
Zoning Codes	Yes
2006 International Building Code	NA
2006 International Residential Building Code	NA
2006 International Plumbing Code,	NA
2006 International Fuel Gas Code,	NA
2006 International Mechanical Code	NA
National Flood Insurance Program Participant	Yes
Community Rating System Participant	Class 10
Recovery Plan	No

Emergency Operations Plan

As stated above, Emergency Management is responsible for maintaining a County Emergency Operations Plan (EOP). At the time of development of this Plan, the EOP was under revision and expected to be adopted prior to the end of 2012. The plan approval process requires review with each agency identified within the EOP. This review process allows for each agency to provide input on the plan components and roles and responsibilities identified in the EOP. This process provides opportunity for each of the identified agencies to meet one-on-one with Emergency Management, to discuss plan components, roles and responsibilities. Additionally, an EOP Workshop is held to allow stakeholders the ability to clarify their roles and responsibilities and ensure a common understanding of the planning goals and objectives.

After review, formal adoption will be coordinated with the Board of County Commissioners. Agencies identified will be invited to attend the scheduled study session/public hearing.

The base EOP and all of the supporting annexes are not developed and updated simultaneously. While the base plan serves as the foundation and legal basis for an emergency management program, much of the material pertaining to the actions taken to respond to disasters is located in the Emergency Support Function (ESF) Annexes, Hazard Specific and Support Annexes. Annexes are developed and implemented through coordination of the lead and support agencies, but do not require Board of County Commissioners approval.

Mitigation Plan

The current County Mitigation Plan was developed by the Denver Regional Council of Governments and adopted by the County in 2010. The mitigation plan, as required by FEMA, was only relative to the natural hazards in Adams County and was not an integral part to the County Emergency Operations Plan or the Comprehensive Plan. The goal of this planning process is to replace the regional plan with a more comprehensive, County-specific mitigation plan and to address the impact of the hazardous materials facilities in Adams County.

Comprehensive Plan

This assessment and Hazard Identification and Risk Assessment were completed in tandem with the overall update to the County's Comprehensive and Transportation Plans. Previous versions of the Emergency Operations Plan and the Comprehensive Plan were not envisioned as related documents. The current planning process is designed to integrate the new Comprehensive Plan with the Hazard Mitigation Plan and identify key priorities based on the hazards in the County and the future land use goals. Several policies from the current Comprehensive Plan are related to natural hazard mitigation.

Local Emergency Planning Commission

Adams County has the number one hazardous materials risk in the state. Not only does it serve as the conduit for five major interstates/highways, but it also has the largest number of hazardous materials facilities (Tier II Facilities) operating in the County.

Despite this risk, the legal and regulatory capabilities of the County to mitigate the additional risk created by hazardous materials facilities in the County are uncertain. State statute requires that the primary governing body having jurisdiction over the local emergency planning district, the County commissioners, shall provide nominations for membership on the local emergency planning committee, upon the request of the Colorado Emergency Planning Commission (CEPC) (24-32-2604, C.R.S.). Alternatively, the CEPC shall appoint members of a local emergency planning committee for each emergency planning district in accordance with the federal act. For local emergency planning districts for which no nominations have been submitted by the governing body, the commission may designate either the County commissioners or city council, as the case may be, to serve as the local emergency planning committee (24-32-2604, C.R.S.).

In Adams County there is no formal record of nominations or appointments to the County Local Emergency Planning Commission. Despite this lack of formal recognition, historically Emergency Management has served as the agency responsible for coordinating the Local Emergency Planning Commission (LEPC). As the coordinating entity, Emergency Management must satisfy all requirements mandated by the County, state, and federal governments including regulations pertaining to hazardous materials facilities (Tier II facilities). This includes records requests, emergency planning responsibilities, and appropriate data management.

The EPA and Colorado Department of Public Health and Environment (CDPHE) require annual reporting for all Hazardous Materials Facilities (Tier II facilities), which are defined as:

- any facility that had at any time stored 10,000 pounds (lbs) of any material that is required to have a MSDS or,
- has an extremely hazardous substance (EHS) 500 lbs or Threshold Planning TPQ for the 356 chemicals listed under Section 302, whichever is lower.

As shown on the EPA's website, "if a tank, drum, container, pipe, or other 'process' at your facility contains any of the extremely hazardous toxic and flammable substances listed in the Code of Feral Regulations (CFR) at 40 CFR 68.130 in an amount above the threshold quantity specified for that substance, you are required to develop and implement a risk management program under a rule issued by the EPA." This is known as the Risk Management Program (RMP) rule and in Colorado, RMP information is submitted to CDPHE, but not necessarily the LEPC. **In other words, without proper governance, expertise, and integration, both the Planning Commission and the LEPC may not have knowledge of the permitted use and effects of facilities within their own jurisdiction.**

The western portion of Adams County is highly industrialized, containing 178 Hazardous Materials Facilities (Tier II facilities) and seventeen (17) known facilities that fall under the Risk Management Program (RMP) Rule.

This information, however, is housed separately from the County planning function and the Planning Commission as required by state statute. A key goal of developing the integrated Comprehensive Plan is to address future incorporation of the LEPC with the existing Planning Commission. The incorporation of these two commissions should help in the creation of an integrated planning process that how hazardous materials facilities are impacted by the natural hazards in Adams County, but also how they impact current and future land use development.

Land Development Standards and Regulations

The Adams County BoCC has adopted standards and regulations with the purpose and intent to "preserve the health, safety, and welfare of the public." In addition to regulating buildings, structures, and the use of land within the County, the regulations are intended to "provide for adequate public utilities and improvements, schools, parks, and other open spaces for public use, and for protection from fire, flood and other dangers."

The Capabilities Assessment included a review of the Standards and Regulations as they apply to hazard mitigation. This section presents the results of the assessment.

Zone District Regulations

The Adams County website includes links to Development Standards and Regulations. Zoning Districts are defined in Chapter 3 - Zone District Regulations, which states "In order to regulate the use of land and buildings, regulate the location, height, bulk and size of buildings and other structures, and to provide for minimum separation between uses and structures, the unincorporated areas of Adams County are divided into the underlying defined zone districts."

The Zone Districts were reviewed with a focus on Hazardous Materials Facilities (Tier II facilities) and uses that are permitted within Industrial, Institutional, Commercial, and Residential areas. The Zone District definitions include three industrial zones:

- **Industrial-1 District** - general commercial and restricted industrial district designed to provide for a variety of compatible business, warehouse, wholesale, offices, and very limited industrial uses.
- **Industrial-2 District** - light manufacturing, processing, fabrication, assembly, and storage of non-hazardous and/or non-obnoxious material and products as well as allowing service facilities for industries and their employees.
- **Industrial-3 District** - heavy industrial district designed to accommodate most industrial enterprises.

Chapter 3 includes a Use Chart with a comprehensive list of the Zoning Districts, Use Categories, and definitions of each Zone District. The major findings of the review are listed below.

- Industrial uses such as extraction or disposal were conditionally permitted in all agricultural, residential, and commercial districts.
- Industrial uses such as heavy industry, heavy manufacturing or processing, light industry, light manufacturing or processing, moderate industry, and moderate manufacturing or processing were listed as not permitted in any residential or commercial zones. This prevents the ability for industries that may store toxic chemicals to be constructed in residential or commercial areas where citizens unfamiliar with the dangers would live and work.
- All residential uses are prohibited from Zone District I-3, preventing the ability for residential units to be constructed in an area where toxic chemicals could be stored.
- Institutional uses such as convalescent homes, nursing homes, libraries, and daycare (child or adult) are permitted in these areas. This potentially allows facilities that house the most vulnerable in the community to be constructed in an area where toxic and flammable chemicals could be stored.

Table 6 presents an excerpt from the Use Chart and highlights permitted Institutional uses within the I-3 Zone and Institutional Care Districts. Each box associated with the Use Category states whether the use is permitted (P), conditional (C), or prohibited (-). All other institutional uses were either conditionally permitted or prohibited. **It should also be noted that Hazardous Materials Facilities (Tier II facilities), along with hospitals, nursing homes, day care facilities and schools are all permitted within the same zoning districts.**

Table 5. Permitted Institutional Uses within the I-3 Zone District. Key: Permitted (P), Conditional (C), or Prohibited (-).

Use Categories	Zone District						
	C-4	C-5	I-1	I-2	I-3	CO	P-L
INSTITUTIONAL USES							
Funeral Home/Mortuary*	P	P	P	P	P	-	-
Funeral Home/Mortuary to include Cremation*	C	C	P	P	P	-	-
Institutional Care	P	P	P	P	P	-	P
Boarding/rooming houses	P	P	P	P	P	-	P
Convalescent homes	P	P	P	P	P	-	P
Convents or monasteries	P	P	P	P	P	-	P
Foster homes	P	P	P	P	P	-	P
Hospitals/clinics	P	P	P	P	P	-	P
Nursing homes	P	P	P	P	P	-	P
Protective living facilities	P	P	P	P	P	-	P
Sanitariums	P	P	P	P	P	-	P
Sheltered care homes	P	P	P	P	P	-	P
Neighborhood Indoor Uses	P	P	P	P	P	-	P
Branch libraries	P	P	P	P	P	-	P
Day care centers (day or nursery schools) (Adult* or Child)	P	P	P	P	P	-	P
Gymnasiums	P	P	P	P	P	-	P
Handball	P	P	P	P	P	-	P
Handball courts	P	P	P	P	P	-	P
Indoor recreational centers	P	P	P	P	P	-	P
Indoor skating rinks (ice or roller)	P	P	P	P	P	-	P
Indoor swimming pools	P	P	P	P	P	-	P
Neighborhood community or recreational centers	P	P	P	P	P	-	P
Public or private primary and secondary schools (excluding trade schools)	P	P	P	P	P	-	P
Racquetball	P	P	P	P	P	-	P
Tennis	P	P	P	P	P	-	P
Outdoor Public Uses	P	P	P	P	P	P/C	P
Arboretums	P	P	P	P	P	P/C	P
Areas for hiking	P	P	P	P	P	P/C	P
Cemeteries, with or without caretaker residences*	P	P	P	P	P	-	-
Garden plots	P	P	P	P	P	P/C	P
Nature areas	P	P	P	P	P	P/C	P
Picnic areas	P	P	P	P	P	P/C	P
Public areas for active recreational activities	P	P	P	P	P	P/C	P
Recreation-oriented parks	P	P	P	P	P	P/C	P
Wildlife sanctuaries	P	P	P	P	P	P/C	P

*Adopted by the BOCC on December 13, 2010

Overlay Zone Districts

Adams County has created Overlay Zone Districts to "regulate the use and development of land and buildings where specific issues or concerns must be mitigated due to unusual and unique circumstances or where alternative design concepts are desired or are necessary to mitigate specific conditions." The Overlay Zone Districts include the following:

- Airport Height Overlay (AHO)
- Airport Influence Zone (AIZ)
- Airport Noise Overlay (ANO)
- Flammable Gas Overlay (FGO)
- Flood Control Overlay (FCO)
- Mineral Conservation Overlay (MCO)
- Natural Resources Conservation Overlay (NRCO)

The Overlay Districts that most impact hazard mitigation are defined below:

FLAMMABLE GAS OVERLAY (FGO). It is the purpose of the Flammable Gas Overlay District to establish reasonable and uniform limitations, safeguards, and controls over uses of land designated as and/or adjacent to an operating or former solid waste disposal site. Any building, excavation, construction, or other use proposed in this zone district shall require testing and/or mitigation related to flammable gas, as specified in this section, prior to obtaining a building permit and after receiving a certificate of occupancy. The requirements of this section are intended to ensure the protection of life and property from such related hazards as flammable gas, gas migration, asphyxiation, and explosion.

FLOOD CONTROL OVERLAY (FCO). The purpose of the Flood Control Overlay Zone District is to establish reasonable limitations and controls of land uses within the 100-year floodplain. The requirements of this section reduce flood hazards, protect the public health, safety, and general welfare, minimize flood losses, promote wise use of the floodplain, and protect the storage capacity and hydraulic character of the floodplain.

Land Development Standards and Regulations

Table 6 presents excerpts from the existing Adams County codes that are directly related to public safety and hazard mitigation with bold text used to highlight the pertinent language.

Table 6. Land Development Codes Applicable to Hazard Mitigation.

Code	Language
4-10-02-03 Extraction And Disposal Uses	Compliance with Colorado Department of Natural Resources. Requirements contained in this section shall not exempt the owner or operator of an extractive industry from compliance with the requirements of Colorado Department of Natural Resources. Prior to the approval of a Conditional Use Permit by the Board of County Commissioners, a reclamation contract shall be signed and approved by the owner or operator and the Colorado Department of Natural Resources.
4-10-02-03-02 Oil And Gas Well Drilling And Production	1. Purpose: The purpose of these oil and gas regulations is to protect the health, safety, and welfare of Adams County residents, to provide for sound environmental practices through the control of all oil and gas operations in the unincorporated areas of Adams County, and to prevent damage to County roads and bridges.

Code	Language
4-10-02-03-02 Oil And Gas Well Drilling And Production	4. Special Performance Standards: a. When Special Performance Standards Apply: Special Performance Standards may be imposed if a proposed oil or gas well location is not compatible with the surrounding area or if a proposed oil or gas well would have an adverse effect on the future development of the area. b. Incompatible Well: The oil or gas well is not compatible with the surrounding area when one (1) or more of the following occur: (1) Well Within 1,000 Feet of Dwelling (2) Well Within ½ Mile of Public Facility (3) Impact on Health, Safety and Welfare: The proposed facility would have an adverse impact on the health, safety, and welfare of the local inhabitants.
4-10-02-03-03 Solid And Hazardous Waste Disposal	1. General Operating and Performance Standards: The following General Operating and Performance Standards are applicable to all Solid Waste Disposal Sites and/or Processing Facilities: a. Compliance with Colorado Solid Waste Act b. Compliance with State Standards and Regulations....
4-10-02-04-03 Chemical, Petroleum, And Explosive Manufacturing	2. Fire District Review.... 4. Outdoor Activities Prohibited 5. Security Fence and Fire Proof Building 6. Prohibited Accessory Uses: Service stations, dwellings, or research laboratories are not considered accessory uses involved in the manufacture and storage of chemicals, petroleum products, or explosives
4-11-01-08 Prioritization Of Open Space Types	The following list represents the relative desirability of different types of open space/conservation areas, and should be used as the basis for determining the optimum location for open space/conservation areas within a proposed Open Space Subdivision: 1. Critical areas including riparian areas and floodplain.
4-11-02-04 Individual Protected Resources And NRCO District	PURPOSE: Waterbodies and wetlands provide critical functions in controlling floodwaters, providing wildlife habitat, cleansing water resources and contributing to the special scenic quality of Adams County. Reserving the one hundred year (100) year floodplain protects against the loss of life and property during flood events. The purposes of this Section are to define critical resources, and establish protection standards for waterbodies, floodplains, and wetlands.
4-11-02-04-02 Individual Protected Resources	1. Purpose: This Section establishes the protection standards for waterbodies, floodplains, and wetlands in order to protect the community as a whole from potential negative impacts caused by development which may affect these resources or their functions. This Section prohibits development on and within a certain distance of these resources.
5-02-07 Required Improvements Prior To The Issuance Of Building Permits	The following improvements shall be required, completed, and have preliminary acceptance granted by the Department of Public Works prior to issuance of a building permit for construction of residential, commercial, or industrial structures: 7. Utilities (including communications, electric power, gas, water, sewer).
5-03-02-04 Hazardous Conditions To Be Avoided Or Eliminated	Land subject to hazardous conditions such as landslides, mud or debris flows, flooding, subsidence, shallow water tables, geologic hazards, open quarries, floods, and non-potable water supply shall be identified and shall not be subdivided until the hazards have been eliminated or will be eliminated by the subdivision construction plans.
5-03-02-06 Design To Not To Encroach Into Floodplains	No developable lots shall be subject to inundation by a 100-year (1% frequency) flood unless an acceptable plan is submitted to alleviate the flooding condition.....

Code	Language
5-03-02-08 Designed To Be Protected From Water Hazards	If a subdivision includes a water hazard such as an irrigation canal, water body or other water channel, necessary design precautions shall be taken to minimize any hazard to life or property, and additional measures such as fencing, water depth indicators, and erection of warning signs shall be taken, to the extent reasonably feasible.
5-04-05-01 Water Supply Approval	New water supply systems for irrigation, fire protection or other purposes required by the Board of County Commissioners shall be reviewed and approved by the appropriate Fire Protection District, Tri-County Health Department, Colorado Division of Water Resources, and the Colorado Department of Public Health and Environment Water Quality Control Division.
5-04-06-01 Individual Wastewater System Approval	New individual wastewater systems for sanitation or other purposes required by the Board of County Commissioners shall be reviewed and approved by the Tri- County Health Department.
9-01-03-09 Floodplain Management Floodplain Management	As part of its zoning resolutions, the County has adopted floodplain regulations necessary to preserve and promote the general health, welfare, and economic wellbeing of the region. The general purposes of floodplain regulations are summarized as follows: . To reduce the hazard of floods to life and property;
9-01-03-10 Retention	In those areas of the County where no outlet presently exists for positive drainage to a major drainage system, the County will require retention of the runoff from a 24-hour, 100-year storm event plus one foot of freeboard until such connection becomes available.....
9-01-11 Bridges	The hydraulic and hydrologic design of bridges within the County shall be in accordance with the Urban Drainage Criteria Manual Volume 2, Structures, Section 4 - Bridges for this section. The Federal Highway Administration Hydraulics of Bridge Waterways or other County-approved resources shall also be used to determine the possible impacts on the drainage way (both upstream and downstream), scour potential and mitigation techniques for a proposed bridge structure. Based upon federal and state requirements, all new and replacement bridges shall comply with the floodplain regulations.

Policies Impacting Flood Capabilities

Adams County participates in the National Flood Insurance Program (NFIP) through FEMA. Based on information available on the FEMA website, the initial Flood Insurance Rate Map was identified in February 1979 and the current effective map date is March 2007. Additional information on the NFIP can be found in the Hazard Identification and Risk Assessment (Appendix C).

Policies and Regulations Impacting Earthquake Capabilities

Adams County has adopted the 2006 IBC. The 2006 IBC includes the ASCE 7-05 Seismic Design Criteria. The ASCE 7-05 Seismic Design Criteria includes a software program that results in design loads for earthquakes. The software requires site specific inputs such as parameters provided in a geotechnical report. Colorado has traditionally been listed in the lowest seismic zone with wind and snow loads controlling building design. Buildings designed to meet the requirements of the 2003 or 2006 IBC standards are expected to be adequate to withstand the severity of an earthquake in Colorado.

Overall Policy and Program Capabilities

This section of the plan evaluates existing plans, policies, programs or activities that increase or decrease the County’s vulnerability to hazards. Policies and programs in place provide the footing necessary to implement mitigation strategies.

The Key Goals for a More Sustainable and Resilient Adams County, taken from the Comprehensive Plan that is being developed in tandem with this hazard mitigation plan, define the broad directions that will need to be taken to achieve our vision over time. Additional information on each of these goals is provided in the Comprehensive Plan. Key Goals include:

1. Promote Coordinated and Connected Growth;
2. Protect the Health, Safety, and Welfare of Adams County’s Inhabitants;
3. Foster Regional Collaboration and Partnerships;
4. Reduce the Fiscal Impact of Growth;
5. Promote Economic Vitality; and
6. Preserve the County’s Natural Resources.

Each of these goals is intrinsically linked to the others. These goals represent the need for a more integrated approach to day-to-day decision making—the need for a clear understanding of how actions in one area of focus affect another and a desire to seek and implement shared solutions. In the implementation of this Plan, each goal should be regarded with equal focus and commitment. Table 7 provides a summary of the current capabilities and the policy and programs that lead to implementation of mitigation strategies.

Table 7. Adams County Capability Assessment Matrix.

Program, Policy, Regulation or Practice	Current Program/Policy	Future Program/Policy
1. Organizational Roles and Capabilities		
Roles of Agencies related to disaster services	EOP	2012 Update
Emergency Operations Center	x	x
Emergency Support Functions with Lead Agency	x	x
Public Education and Outreach	-	2012 position created
Local Emergency Planning Commission	-	Expand to all hazards identified in HIRA
2. Operational and Training Capabilities		
First Responders	x	x
Dispatch Agencies	x	X
Joint Information Centers	-	Formal process to coordinate
Emergency Operations Center	x	x
Policy Group	x	x
Training Capabilities	-	2012 position created
3. Administrative and Technical Capabilities		
Technical Expertise	x	x
Geographic Information Systems (GIS)	x	x

Overall Policy and Program Capabilities | Policies and Regulations Impacting Earthquake Capabilities

Program, Policy, Regulation or Practice	Current Program/Policy	Future Program/Policy
Incident Command	x	
Integration with other planning efforts	-	2012 Adoption
4. Fiscal Capabilities		
Response and Recovery funds	x	x
Hazard Mitigation related capital projects	x	x
Stormwater fees	-	Under Development
5. Legal and Regulatory Capabilities		
Planning integration	x	x
Emergency Operations Plan	x	2012 Adoption
Land Use and Zoning Codes	x	2012 Adoption
International Building Code Adoption	x	
Zoning District Regulations	-	Review Hazardous Material Facility locations and where permitted
Overlay Districts	x	x
Recovery Plan	-	
Local Emergency Planning Commission	-	Formal process to appoint
6. Policy & Program Capability		
Hazard Mitigation Plan	x	2012 Adoption
Emergency Operations Plan	x	2012 Adoption
Comprehensive Plan	x	2012 Adoption
Ordinances and Building Codes	x	
Floodplain Management Plan	-	Strategy Action in HIRA